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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/623,198	07/18/2003	Bruce Baretz	ATMI-198-CON	2836

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INTELLECTUAL PROPERTY / TECHNOLOGY LAW
PO BOX 14329
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EXAMINER

LE, THAO X

ART UNIT	PAPER NUMBER
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2814

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/29/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/623,198

Applicant(s)

BARETZ ET AL.

Examiner

Thao X. Le

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 and 25-69 is/are pending in the application.
- 4a) Of the above claim(s) 1-17 and 25-30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 31-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 39-69 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/20/06, 08/23/06
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election of Species 2, claims 31-38 and 43-69 in the reply filed on 11/20/07 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Newly submitted claims a) 44-52, b) 53-54, c) 55-63, d) 64-69 directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: Claims 53-69 are directed to fig. 5-6 of the non-elected claims. Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 53-69 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 31-36 are is rejected under 35 U.S.C. 103(a) as being unpatentable over US 3819974 to Stevenson et al in view of US 5237182 to Kitagawa et al. or US 5770887 to Tadatomo et al.

Regarding claim 31, Stevenson discloses a display including at least one light emission device, wherein each light emission device comprises an LED energizable to emit radiation (violet), col. 3 line 26, and a luminophoric medium (phosphor), col. 3 line 31, arranged to be impinged by radiation emitted from the LED and to responsively emit radiation in a range of visible white light spectrum, column 3 lines 26-31 and column 4 lines 1-5.

But, Stevenson does not disclose the LED emits radiation in the blue to ultraviolet spectrum.

However, both Kitagawa and Tadatomo disclose in fig. 1 and fig. 3 a LED emits radiation with a emission maximum in a spectral range in the blue to ultraviolet spectrum, col. 1 line 11 and col. 1 lines 31-33, respectively. At the time the invention was made; it would have been obvious to one of ordinary skill in the art to use the LED teaching of Kitagawa or Tadatomo in Stevenson's device,

because it would have provided a LED having good and efficient emitting radiation in blue to ultraviolet spectrum as taught by Kitagawa in col. 1 lines 7-15 and Tadatomo in col. 1 line 4-10.

Although the prior art does not specially disclose the 'white light' limitation, this feature is seen to be either inherent or obvious because the combination of Stevenson and Kitagawa and/or Tadatomo is substantially identical to that of the claims, claimed properties or functions are presumed to be inherent. Or where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a *prima facie* case of either anticipation or obviousness has been established. *In re Best*, 195 USPQ 430, 433 (CCPA 1977) and MPEP 2112.01.

Regarding claims 32-33, Stevenson discloses the display wherein the luminophoric medium of each light emission device comprises phosphor material, col. 3 line 31, wherein the luminophoric medium comprises material responsively emitting radiation in at least the green spectrum. The luminophoric medium recited in Stevenson is substantially identical to that of the claims, claimed properties or functions are presumed to be inherent. Or where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a *prima facie* case of either anticipation or obviousness has been established. *In re Best*, 195 USPQ 430, 433 (CCPA 1977) and MPEP 2112.01.

Regarding claim 34, Stevenson does not disclose the display wherein the LED in each light emission device comprises a blue light LED.

However, as discussed in the claim 31 above, both Kitagawa and Tadatomo disclose blue light LED for the same reason.

Regarding claim 35, the combination of Stevenson and Kitagawa and/or Tadatomo have the white light output of each light emission device comprises primary radiation emission from the LED and a secondary radiation emission from the luminophoric medium (phosphor) for the same reason as discussed in the claim 31 above.

Regarding claim 36, Stevenson, Kitagawa, and Tadatomo disclose the display wherein the LED comprises material selected from the group consisting of: GaN, col. 1 line 63, col. 4 line 39, and col. 3 line 14, respectively.

6. Claims 37-38 are is rejected under 35 U.S.C. 103(a) as being unpatentable over US 3819974 to Stevenson et al and US 5237182 to Kitagawa et al. or US 5770887 to Tadatomo et al. as applied to claims 31 above and further in view of US 5771039 to Ditzik.

Regarding claim 37-38, Stevenson does not disclose the display comprising a liquid crystal display or a backlight display.

However, Ditzik discloses a display device comprising a liquid crystal display or a backlight display including LED, col. 3 lines 4. At the time the invention was made; it would have been obvious to one of ordinary skill in the art

to use the teaching of Ditzik with Stevenson, because LED can be used as a light source for LCD or backlight.

Response to Arguments

7. Applicant's arguments filed 20 Nov. 2006 and 28 June 2006 have been fully considered but they are not persuasive. The Applicant argues that Stevenson discloses no actual phosphor and is wholly speculative on the utility of such application. First, the phosphor disclosed by the instant application may be different than that of the phosphor as disclosed by Stevenson. However, the claim language fails to claim such differences. Thus, it appears that the Applicant argues that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the differences of phosphor) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Second, Stevenson discloses the light may be converted to lower frequencies with phosphor material, col. 3 lines 29-31. And such conversion is confirmed by the Applicant in page 6 last paragraph clearly discloses the UV light is absorbed by the phosphor layer, which in turn can offer white light.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thao X. Le whose telephone number is (571) 272-1708. The examiner can normally be reached on M-F from 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael M. Fahmy can be reached on (571) 272 -1705. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

22 Jan. 2007

A handwritten signature in black ink, consisting of a stylized 'T' followed by a horizontal line and a vertical stroke.

THAO X. LE
PRIMARY PATENT EXAMINER